

IN THE SPECIFICATION

Applicant amends paragraphs [0007], [0012] – [0016] and [0033] of the Specification to read as follows with markings to show current changes:

[0007] A well pump assembly is designed for pumping a mixed flow of liquid and gas. The well pump assembly includes a conditioning impeller. The conditioning impeller has a hub with a bore for engaging a shaft for rotation therewith in a forward rotation direction. The pump assembly also has a stationary conditioning diffuser. The conditioning diffuser is juxtaposed with the conditioning impeller to receive fluid from the impeller. The conditioning diffuser has a plurality of blades that incline from a downstream side to [[a]] an upstream side of the diffuser in a rearward rotational direction. Each conditioning impeller has a plurality of impeller vanes extending from the outer circumference of the hub of the conditioning impeller. Each of the vanes incline in the forward rotational direction from [[an]] a downstream side of the impeller, defining a leading edge and a trailing edge. A radial line passing through an outer end of the leading edge of each of the vanes is rotationally forward of an inner end of the leading edge of each of the vanes for forcing liquid and gas radially inward and into the diffuser.

[0012] Figure 5 [[4]] is a top plan view of a diffuser of the centrifugal pump of Figure 1.

[0013] Figure 4 [[5]] is a sectional view of an impeller blade of the impeller shown in Figure 3.

[0014] Figure 6 is a perspective view the diffuser impeller shown in Figure 5 [[3]] with the outer ring of the diffuser removed therefrom.

[0015] Figure 7 is a partial perspective view of the impeller of Figure 3 located below and rotating relative to the diffuser of Figure 5 [[4]].

[0016] Figure 8 is a sectional view of an alternative embodiment of a centrifugal separator having the impeller shown in Figure 3 and the diffuser shown in Figure 5 [[4]].

[0033] In operation, pump assembly 11 is suspended from production tubing 17 within conduit 13. Power cable 27 conveys electrical power to motor 25 which then drives shaft 33. Rotation of shaft 33 causes upper and lower impellers 39, 61 to rotate ~~rotated~~ within pump housing 29. The trailing edges, or suction sides of

each impeller 39, 61 creates a slight pressure drop within pump housing 19 that draws well fluid 15 into pump 19 through pump inlet 20. Well fluid 15 entering pump 19 typically comprises gas-saturated liquid hydrocarbons. Well fluid 15 enters lower section 37. Within each conditioning stage 65 of impellers and diffusers 61, 63 in lower section 37, impellers 61 mix well fluid 15, while increasing the fluid velocity of well fluid 15, by forcing well fluid radially inward. Due to the outer end of each vane 71 leading the corresponding inner end, well fluid 15 is pushed radially inward, against the centrifugal forces imparted on well fluid 15 through the rotation of impellers 61. This helps to decrease the tendency of the gases saturated or entrained in well fluid 15 to separate from the liquids and form pockets of gas within pump 19.